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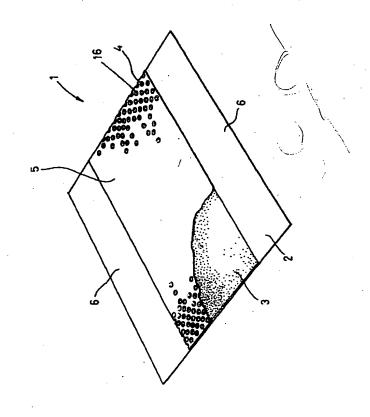
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(54) 【発明の名称】 掃除用シート

(57) 【要約】

【課題】 床面に対する滑りがよく、しかもごみの保持 力が強い掃除用シートを得る。

【解決手段】 汚れやごみを拭き取るための掃除用シー ト1の少なくとも片面が、弱粘着性または非粘着性の第 1面域5と、強粘着性の第2面域4とからなり、第1面 域5が床面に接触したときに第2面域4は床面から上方 へ離間した位置にある。



【特許請求の範囲】

【請求項1】床面の汚れやごみを拭き取るための掃除用シートであって、

前記シート両面の少なくとも一方が第1面域と、該第1面域が床面に接触したときにその床面から離間して上方に位置する第2面域とからなり、前記第1面域が相対的に弱粘着性または非粘着性であり、前記第2面域が相対的に強粘着性であることを特徴とする前記掃除用シート。

【請求項2】前記シートが、基材シートと、該基材シート両面の少なくとも一方に接合する両面粘着シートと、該粘着シートに接合するメッシュ地とからなり、該メッシュ地の上面が前記第1面域を形成し、該メッシュ地からのぞく前記粘着シート部分が前記第2面域を形成している請求項1記載の掃除用シート。

【請求項3】前記第1面域と第2面とが少なくとも一方向に交互に配置されている請求項1記載の掃除用シート。

【請求項4】前記第1面域と第2面域とがそれぞれ同方向に連続的に延びている請求項1記載の掃除用シート。 【請求項5】前記第1面域の厚み方向の弾性が前記第2 面域のそれよりも高い請求項1記載の掃除用シート。

【発明の詳細な説明】

[0001]

[発明が属する技術分野] この発明は、床面の汚れやご みを拭き取るための掃除用シートに関する。

[0002]

【従来の技術】従来、この種シートとして、不織布を起 毛したものや不織布に油剤を含浸させたもの、基材とな るシートに粘着剤を塗布したもの等が周知である。

[0003]

【発明が解決しようとする課題】前記周知の掃除用シートのうち、不織布を起毛したものは、床面に対する滑りはよいが、砂粒等のような比較的重いごみを保持する力に劣るから、そのようなごみの拭き取りには適さない。不織布に油剤を含浸させたものは、ごみの保持力が向上するものの、それでも十分とは言い難い場合がある。粘着剤を使用した掃除用シートは、ごみの保持力が優れてはいても、その粘着性のゆえに床面に対する滑りがよくない。加えて、この掃除用シートは、手にくっつくことがあるから、時によって取り扱いにくいことがある。

【0004】そこで、この発明は、ごみの保持力に優れ、床面に対する滑りがよく、しかも、手にくっつくことがなくて取り扱いが容易な掃除用シートを得ることを課題にしている。

[0005]

【課題を解決するための手段】前記課題を解決するためにこの発明が前提とするのは、床面の汚れやごみを拭き取るための掃除用シートである。かかる前提において、この発明が特徴とするところは、前記シート両面の少な

くとも一方が第1面域と、該第1面域が床面に接触した ときにその床面から離間して上方に位置する第2面域と からなり、前記第1面域が相対的に弱粘着性または非粘 着性であり、前記第2面域が相対的に強粘着性であるこ とにある。

[0006]

【実施例】添付の図面を参照して、この発明にかかる掃除用シートの詳細を説明すると、以下のとおりである。 [0007] 図1に部分破断斜視図で示す掃除用シート1は、不織布製の基材シート2と、上下両面が粘着性の中間シート3と、シート3よりも粘着性が弱いか、または、粘着性が全くないメッシュ地の表面シート5とによって構成されている。表面シート5は、多数の透孔4を有し、中間シート3を介して基材シート2に接合し、透孔4には、中間シート3の上面側の粘着面がのぞいている。 図示の中間シート3と表面シート5とは、ほぼ同形同大で重なり合い、基材シート2は、それらシート3、5と長さが同じであるが、幅が広く、シート3、5の左右側縁から延出する側縁部6を有する。

【0008】図2は、床面掃除用の器具11に取り付けられた掃除用シート1の斜視図である。器具11は、板状部13と、板状部13に枢動可能に取り付けられた腕部14とからなる。掃除用シート1は、板状部13の下面に当てがわれ、側縁部6が板状部13の上面に折り重ねられて、クリップ8で着脱可能に止着されている。かかる器具11は、腕部14を持ち、掃除用シート1の表面シート5で床面を拭くことができる。

[0009] 器具11に取り付けられた掃除用シート1 では、ほこり等の比較的軽いごみが表面シート5を構成 する不織布繊維に絡み付くことによって、また表面シー ト5に粘着性があるときにはその粘着性によって捕捉さ れる。砂粒等の比較的重く、形状が繊維に絡みつきにく いごみは、表面シート5の透孔4の中に入り、透孔4内 における中間シート3の粘着面において捕捉される。表 面シート5に使用する不織布は、ゴミの捕捉が容易とな るように、それに起毛処理を施したり、捲縮繊維を使用 して、嵩高なものにしたり、油剤を含浸させたりするこ とができる。また、表面シート5は、その厚みによっ て、透孔4の深さを変えることができるが、その厚み方 向への弾性(クッション性)が比較的よく、掃除用シー ト1の使用中に、透孔4の深さにかかわりなく、中間シ ート3の粘着面が床面に適宜近接するようにしてあるこ とが好ましい。この掃除用シート1では、透孔4の縁部 16が床に付着したごみをかき取るように作用し、かき 取ったごみは透孔4で捕捉することができる。

[0010] このように使用される掃除用シート1の表面シート5は、床面に対する滑りがよくなるように、粘着性が中間シート3のそれよりも弱くしてあるか、または、粘着性を有していない。

【0011】掃除用シート1を器具11に取り付けると

きには、指が中間シート3に触れないように基材シート2と表面シート5とを持てば、指は粘着面にくっつくことがない。掃除用シート1は、それが器具11に取り付けるものではなければ側縁部6を省き、中間シート3や表面シート5と同形同大のものにすることができる。

【0012】図3は、この発明の実施態様の一例を示す図1と同様の図面である。この掃除用シート1では、図1の表面シート5に代わって中間シート3を被覆する多数の円盤17が床面に接触する。円盤17は、中間シート3の上面に互いに四方向へ離間して配設されており、個々の円盤17は、所要厚みの不織布やフェルトを打ち抜くことにより形成されている。かかる掃除用シート1を図1のそれにと比べると、このシート1では、床面を拭いたときにごみが隣り合う円盤17どうしの間に入ってシート1の中央部に達し、そこで円盤17の側面や中間シート3に捕捉される機会が多くなる。それゆえ、シート1の面積全体を効率よく利用することができる。

【0013】図4は、この発明のさらに他の実施態様を示す図3と同様の図面である。この掃除用シート1では、円盤17に代わって一方向に互いに平行に延びる複数の帯片18が中間シート3を被覆し、床面に接触する。かかる帯片18には、所要厚みの不織布やフェルト等の繊維からなるシートを所要幅に裁断したもの、フィラメントや割裂繊維等で比較的径の大きいものまたはそれらの束などを使用することができる。

【0014】この発明において、粘着面を覆い、床面をこするために使用される図1の表面シート5や、それに代わる図3、4の円盤17、帯片18は、中間シート3に対してこのシート3の粘着力によって接合していればよい。中間シート3と表面シート5とは、基材シート2

の両面にあって、掃除用シート1の片面が汚れたなら、 それを裏返して使用できるようにしてもよい。基材シート2や中間シート3には、図示例の他に、適宜のシート 材料を使用することができる。

【0015】掃除用シート1は、床面の掃除に適したものではあるが、壁面や天井面等の適宜の場所の掃除に使用することができる。

[0016]

【発明の効果】この発明に係る掃除用シートは、その汚れ拭き取り面が床面に接触する弱粘着性または非粘着性の面と、床面に接触しない強粘着性の面とで構成されているから、床面に対する滑りがよく、しかも強い捕捉力を有する。かかる掃除用シートは、手にくっつくことがないから、その取り扱いが容易である。

【図面の簡単な説明】

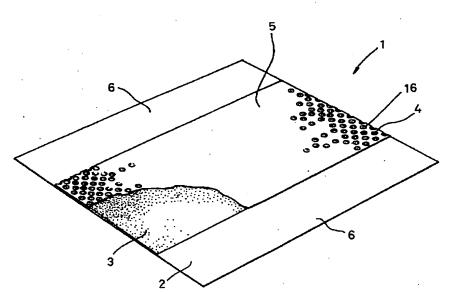
- 【図1】掃除用シートの部分破断斜視図。
- 【図2】使用状態にある掃除用シートの斜視図。
- 【図3】この発明の実施態様の一例を示す図1と同様の 図面。

【図4】この発明の実施態様の他の一例を示す図1と同様の図面。

【符号の説明】

- 掃除用シート
- 2 基材シート
- 3 中間シート(両面粘着シート)
- 4 第2面域
- 5 第1面域(不織布)
- 17 第1面域(円盤)
- 18 第1面域(帯片)

[図1]





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(71)Applicant: UNI CHARM CORP

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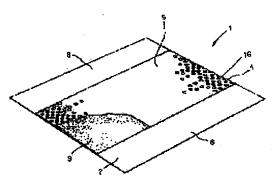
(72)Inventor: TOMITA KATSUJI

(54) SHEET FOR CLEANING

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain a sheet for cleaning which has the excellent holding power of dust and slips well on a floor surface by boring a relatively weakly tacky adhesive or non-tacky adhesive sheet with many through-holes and joining the sheet to a relatively the strongly tacky adhesive sheet.

SOLUTION: The sheet 1 for cleaning is composed of a base material sheet 2 made of a non-woven fabric, an intermediate sheet 3 which is tacky adhesive on both front and rear surfaces and a front surface sheet 5 of a meshed fabric which is weaker in tacky adhesiveness than the sheet 3 or has no tacky adhesion at all. The front surface sheet 5 has the many through-holes 4 and the tacky adhesive surface on the front surface side of the intermediate sheet 3 faces the through-holes 4. The relatively light dirt, such as dust, is entangled with the non-woven fabric fibers constituting the front surface sheet 5 of the sheet 1 for cleaning constituted in such a manner and if the front surface sheet 5 is has the tacky



adhesion, the dirt is captured by the tacky adhesiveness. The relatively heavy dirt, such as sand grains, having the shapes to be hardly entangled with the fibers is admitted into the throughholes 4 of the front surface sheet 5 and is captured by the tacky adhesive surface of the intermediate sheet 3 in the through-holes 4.

LEGAL STATUS

[Date of request for examination]

20.05.1999

[Date of sending the examiner's decision of rejection]

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[Patent number]

3231993

[Date of registration]

14.09.2001

[Number of appeal against examiner's decision

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CLAIMS

[Claim(s)]

[Claim 1] Said sheet for cleaning characterized by being a sheet for cleaning for wiping off dirt and the contaminant of a floor line, and for at least one side of said sheet both sides consisting of the 1st area and the 2nd area in which it estranges from the floor line when this 1st area contacts a floor line, and it is located up, for said 1st area being weak adhesiveness or non—adhesiveness relatively, and said 2nd area being strong adhesiveness relatively.

[Claim 2] The sheet for cleaning according to claim 1 with which said sheet consists of a base material sheet, a double-sided pressure sensitive adhesive sheet joined to at least one side of these base material sheet both sides, and a mesh ground joined to this pressure sensitive adhesive sheet, the top face of this mesh ground forms said 1st area, and said pressure sensitive adhesive sheet part removed from this mesh ground forms said 2nd area.

[Claim 3] Said sheet for cleaning according to claim 1 with which the 1st area and the 2nd page are arranged by turns at least in the one direction.

[Claim 4] The sheet for cleaning according to claim 1 with which said 1st area and 2nd area have extended continuously in this direction, respectively.

[Claim 5] The sheet for cleaning according to claim 1 with the elasticity of the thickness direction of said 1st area higher than that of said 2nd area.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

-[0001]

[The technical field to which invention belongs] This invention relates to the sheet for cleaning for wiping off dirt and the contaminant of a floor line.

T00027

[Description of the Prior Art] Conventionally, what napped the nonwoven fabric, the thing which infiltrated oils into the nonwoven fabric, the thing which applied the binder to the sheet used as a base material are common knowledge as this seed sheet.

[0003]

[Problem(s) to be Solved by the Invention] Although slipping over a floor line is good, since what napped the nonwoven fabric among the sheets for cleaning of said common knowledge is inferior to the force of holding comparatively heavy contaminants, such as sand granules, it is not suitable for wiping of such a contaminant. Although the holding power of what infiltrated oils into the nonwoven fabric of a contaminant improves, it may still be hard to be referred to as enough. The sheet for cleaning which used the binder does not have slipping good for because of the adhesive one over a floor line, even if the holding power of a contaminant is excellent. In addition, since it may adhere to a hand, by the way, therefore, it may be hard to deal with this sheet for cleaning.

[0004] Then, this invention is excellent in the holding power of a contaminant, and its slipping over a floor line is good, and it makes it the technical problem not to adhere to a hand moreover and to obtain the sheet for cleaning with easy handling.

[0005]

[Means for Solving the Problem] In order to solve said technical problem, a premise [invention / this] is a sheet for cleaning for wiping off dirt and the contaminant of a floor line. In this premise, the place by which this invention is characterized is in at least one side of said sheet both sides consisting of the 1st area and the 2nd area in which it estranges from that floor line when this 1st area contacts a floor line, and it is located up, said 1st area being weak adhesiveness or non-adhesiveness relatively, and said 2nd area being strong adhesiveness relatively.

[0006]

[Example] It is as follows when the detail of the sheet for cleaning concerning this invention is explained with reference to an attached drawing.

[0007] The sheet 1 for cleaning shown in <u>drawing 1</u> with a partial fracture perspective view has adhesiveness weaker than the middle sheet 3 of adhesiveness [both sides / made of a nonwoven fabric / the base material sheet 2 and vertical both sides], and a sheet 3, or it is constituted by the surface sheet 5 of the mesh ground without adhesiveness. It has many bores 4, and joins to the base material sheet 2 through the middle sheet 3, and the adhesive face by the side of the top face of the middle sheet 3 is removing the surface sheet 5 to the bore 4. Mostly, although overlap and the base material sheet 2 have die length the same as these sheets 3 and 5, its width of face is wide, and the middle sheet 3 and the surface sheet 5 of illustration have the side edge section 6 which extends from the right-and-left side edge of sheets 3 and 5



[0008] <u>Drawing 2</u> is the perspective view of the sheet 1 for cleaning attached in the instrument 11 for floor line cleaning. An instrument 11 consists of a plate-like part 13 and an arm 14 attached in the plate-like part 13 possible [a drive]. Reliance is divided into the inferior surface of tongue of a plate-like part 13, the side edge section 6 is turned up by the top face of a plate-like part 13, and the sheet 1 for cleaning is attached firmly removable with a clip 8. This instrument 11 can have an arm 14 and can wipe a floor line with the surface sheet 5 of the sheet 1 for cleaning.

[0009] With the sheet 1 for cleaning attached in the instrument 11, by getting twisted around the nonwoven fabric fiber from which comparatively light contaminants, such as dust, constitute the surface sheet 5, when adhesiveness is in the surface sheet 5 again, it is caught by the adhesiveness. Sand granules etc. are comparatively heavy, and the contaminant with which a configuration cannot get twisted around fiber easily enters into the bore 4 of the surface sheet 5, and is caught in the adhesive face of the middle sheet 3 in a bore 4. Piloerection processing is performed to it, or a crimped staple is used for the nonwoven fabric used for the surface sheet 5, it can be made a bulky thing or it can infiltrate oils so that prehension of dust may become easy. Moreover, although the surface sheet 5 can change the depth of a bore 4 with the thickness, the elasticity (cushioning properties) to the thickness direction is comparatively good, while using the sheet 1 for cleaning, there is no relation in the depth of a bore 4, and it is desirable [the sheet] to make it the adhesive face of the middle sheet 3 have approached suitably at the floor line. It can act so that the edge 16 of a bore 4 may write the contaminant adhering to a floor with this sheet 1 for cleaning, and the written contaminant can be caught by the bore 4.

[0010] Thus, adhesiveness is made weaker than that of the middle sheet 3, or the surface sheet 5 of the sheet 1 for cleaning used does not have adhesiveness so that slipping over a floor line may become good.

[0011] If a finger has the base material sheet 2 and the surface sheet 5 so that the middle sheet 3 cannot be touched when attaching the sheet 1 for cleaning in an instrument 11, a finger will not adhere to an adhesive face. If it does not attach in an instrument 11, the sheet 1 for cleaning can exclude the side edge section 6, and can make it the thing of the middle sheet 3, the surface sheet 5, and isomorphism Doshisha University.

[0012] <u>Drawing 3</u> is the same drawing as <u>drawing 1</u> which shows an example of the embodiment of this invention. With this sheet 1 for cleaning, the disk 17 of a large number which cover the middle sheet 3 instead of the surface sheet 5 of <u>drawing 1</u> R> 1 contacts a floor line. The disk 17 of each other is estranged and arranged in the top face of the middle sheet 3 in the four directions, and each disk 17 is formed by piercing the nonwoven fabric and felt of necessary thickness, this sheet 1 for cleaning — it of <u>drawing 1</u> — ** — if compared, with this sheet 1, when a floor line is wiped, it will enter among disk 17 which a contaminant adjoins, the center section of the sheet 1 will be arrived at, and the opportunity caught by the side face and the middle sheet 3 of a disk 17 there will increase. So, the whole area of a sheet 1 can be used efficiently.

[0013] <u>Drawing 4</u> is the same drawing as <u>drawing 3</u> which shows the embodiment of further others of this invention. With this sheet 1 for cleaning, two or more pieces 18 of a band mutually prolonged in parallel in an one direction instead of a disk 17 cover the middle sheet 3, and contact a floor line. The things which have a comparatively large path, or those bundles can be used for this piece 18 of a band for what cut out the sheet which consists of fiber, such as a nonwoven fabric of necessary thickness, and felt, to necessary width of face, a filament, cleavage fiber, etc.

[0014] What is necessary is to have covered the adhesive face and just to have joined the surface sheet 5 of <u>drawing 1</u> used in order to rub a floor line, <u>drawing 3</u> and the disk 17 of 4 which replace it, and the piece 18 of a band according to the adhesion of this sheet 3 to the middle sheet 3 in this invention. The middle sheet 3 and the surface sheet 5 are in both sides of the base material sheet 2, and one side of the sheet 1 for cleaning may enable it to use them for dirt shelves and it, turning over. A proper sheet material can be used for the base material sheet

2 or the middle sheet 3 des the example of illustration.
[0015] Although the sheet 1 for cleaning is a thing suitable for cleaning of a floor line, it is applicable to cleaning of proper locations, such as a wall surface and a head-lining side.
[0016]

[Effect of the Invention] Since that dirt wiping side consists of a weak adhesive or non-adhesive field in contact with a floor line, and a field of strong adhesiveness which does not contact a floor line, the sheet for cleaning concerning this invention has the prehension force in which slipping over a floor line is strong at best moreover. Since this sheet for cleaning does not adhere to a hand, the handling is easy for it.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The partial fracture perspective view of the sheet for cleaning.

[Drawing 2] The perspective view of the sheet for cleaning in a busy condition.

[Drawing 3] The same drawing as <u>drawing 1</u> which shows an example of the embodiment of this invention.

[Drawing 4] The same drawing as drawing 1 which shows other examples of the embodiment of this invention.

[Description of Notations]

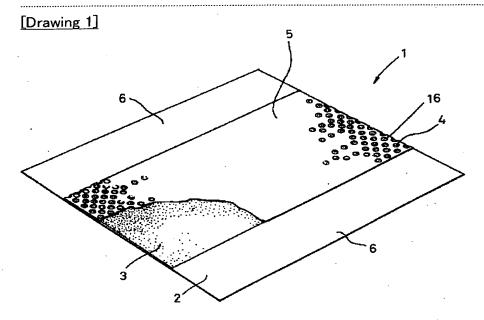
- 1 Sheet for Cleaning
- 2 Base Material Sheet
- 3 Middle Sheet (Double-sided Pressure Sensitive Adhesive Sheet)
- 4 2nd Area
- 5 1st Area (Nonwoven Fabric)
- 17 1st Area (Disk)
- 18 1st Area (Piece of Band)

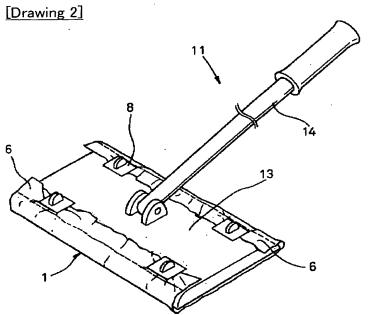
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DRAWINGS





[Drawing 3]

